Performance Summary Table 2:
Prevention Indicators

Performance Indicator	FY Targets	Actual Performance	Reference
Public Health Nursing Indicator			
Indicator 22: Increase the number of public health nursing services (primary and secondary treatment and preventive services) provided to infants and elders.	**Total Visits** **FY 02:** +2% over FY 01 **FY 01:** +3% over FY 00* **FY 00:** 7% over 97 or 363,033 **FY 99:** no indicator **Home Visits** **FY 02:** +2% over FY 01 **FY 01:** +3% over FY 00* **FY 00:** 7% over 97 or 127,846 **FY 99:** no indicator	**FY:02:** **FY 01:** **FY 00:** 371,548** (9.5 % over FY 97) **FY 99:** 336,134 **FY 97:** 339,283 baseline **FY 02:** **FY 01:** **FY 00:** 127,873** (7% over 97) **FY 99:** 111,836 **FY 97:** 119,482 baseline	**P:** p. 81 **B:** p. IHS-73 * indicates revised FY 2001 measure, see Summary of Changes Table on pages 126-130. ** provisional data pending final verification
Immunization Group			
Indicator 23: Increase the proportion of AI/AN children who have completed all recommended immunizations by the age two.	**FY 02:** +1% over FY 01 level **FY 01:** +1% over FY 00 level* **FY 00:** +2% over FY 99 level **FY 99:** 91%	**FY 02:** **FY 01:** **FY 00:** 86% 12 of 12 Areas (-3%) **FY 99:** 89% 12of 12 Areas 87% 11of 12 Areas **FY 98:** 88% (baseline 11 of 12 Areas)	**P:** p. 83 **B:** p. IHS-27 p. IHS-85 p. IHS-73 p. IHS-81 * indicates revised FY 2001 measure, see Summary of Changes Table on pages 123-130.
Indicator 24: Increase overall pneumococcal and influenza vaccination levels among diabetics and adults aged 65 years and older.	**Influenza** **FY 02:** +1% over FY 01 level **FY 01:** +1% over FY 00 level* **FY 00:** 65% **FY 99:** no indicator **Pneumococcal** **FY 02:** +1% over FY 01 level **FY 01:** secure electronic baseline* **FY 00:** 65% **FY 99:** no indicator	**FY 02:** **FY 01:** **FY 00:** 30.7% new electronic sample baseline **FY 98:** 63% baseline from diabetes audit **FY 02:** +1% over FY 01 level **FY 01:** **FY 00:** data source inadequate **FY 99:** **FY 98:** 63% baseline from diabetes audit	**P:** p. 84 **B:** p. IHS-27 p. IHS-85 p. IHS-73 p. IHS-81 * indicates revised FY 2001 measure, see Summary of Changes Table on pages 126-130.

Performance Indicator	FY Targets	Actual Performance	Reference
Injury Prevention Group			
Indicastor 25: Expanding the number of tribes/tribal organizations with comprehensive injury prevention programs	**FY 02:** 30 sites **FY 01:** no indicator **FY 00:** no indicator	**FY 02:** **FY 01:** **FY 00:** baseline 25 sites	**P:** p. 86 **B:** p. IHF-39
Indicator 26: Reduce the number of unintentional injuries for AI/AN people.	**Hospitalizations** **FY 02:** 2% under FY 01 level **FY 01:** 70 per 10,000 **FY 00:** 71.5 per 10,000 **Deaths** **FY 99:** 93/100,000	**FY 02:** **FY 01:** **FY 00:** 05/01 **FY 98:** 72.5 /10,000 hosp. **FY 96:** 74.7/10,000 hosp. **FY 99:** 12/02 **FY 94-96:** 92.6/100,000 deaths **FY 92-94:** 95.0/100,000 deaths	**P:** p. 87 **B:** p. IHF-39 p. IHS-73 p. IHS-81
Suicide Prevention Indicator			
Indicator 27: Increase percentage of I/T/Us that have implemented a suicide surveillance system to monitor the incidence and prevalence rates of suicidal acts (ideation, attempts, and completions) which assures those at risk receive services, and that appropriate population-based prevention interventions are implemented.	**FY 02:** + 10% over FY 01 level **FY 01:** 50% of I/T/Us implem. **FY 00:** no indicator **FY 99:** no indicator	**FY 02:** **FY 01:** **FY 00:** 05/01 **FY 99:** **FY 98:** estimated 25%	**P:** p. 89 **B:** p. IHS-41
Pilot Prevention Group			
Indicator 28: Collaborate with NIH and AI/AN sites in developing and implementing culturally sensitive community-directed pilot cardiovascular disease prevention programs.	**FY 02:** 3 sites implementing interventions **FY 01:** 3 sites with intervention plan* **FY 00:** no indicator **FY 99:** no indicator	**FY 02:** **FY 01:**	**P:** p. 90 **B:** p. IHS-109 * indicates revised FY 2001 measure, see Summary of Changes Table on pages 126-130.
Indicator 29: Maintain ongoing body mass index (BMI) assessments in AI/AN children 3-5 years old and/or 8-10 years old, for both intervention pilot sites and non-intervention comparison sites, as part of an overall assessment of the ongoing childhood obesity prevention project's effectiveness.	**FY 02:** continue implementation and access community acceptance **FY 01:** implement program and monitor pilots and comparisons sites **FY 00:** establish five pilot sites **FY 99:** develop approach and baselines	**FY 02:** **FY 01:** **FY 00:** pilot sites established **FY 99:** approach and baseline accomplished	**P:** p. 92 **B:** p. IHS-27 p. IHS-109 p. IHS-129 p. IHS-73 p. IHS-81

Performance Indicator	FY Targets	Actual Performance	Reference
Indicator 30: Develop at least five regional tobacco control centers to assist AI/AN health facilities and organizations with tobacco prevention and cessation activities.	**FY 02:** commence all prescribed control activities in 5 sites **FY 01:** establish five tobacco control centers **FY 00:** establish baseline rates for tobacco usage **FY 99:** no indicator	**FY 02:** **FY 01:** **FY 00:** baseline rates established	**P:** p. 94 **B:** p. IHS-27 p. IHS-109 p. IHS-141
HIV/AIDS Group			
Indicator 31: Maintain ongoing surveillance of HIV/AIDS and determine the level of completeness of reporting	**FY 02:** six Areas assessed **FY 01:** one Area assessed **FY 00:** establish baseline rates **FY 99:** no indicator	**FY 02:** **FY 01:** **FY 00:** partially established	**P:** p. 96 **B:** p. IHS-27 p. IHS-109 p. IHS-141
Indicator 32: Increase the percentage of high risk sexually active persons who know their HIV status and have received risk reduction counseling.	**FY 02:** +10% over baseline **FY 01:** Establish baseline **FY 00:** no indicator **FY 99:** no indicator	**FY 02:** **FY 01:** **FY 00:** no baseline	**P:** p.97 **B:** p. IHS-109 p. IHS-141
Environment Surveillance Indicator			
Indicator 33: Develop environmental health surveillance system. And complete community environmental assessments in AI/AN communities.	**FY 02:** +10% over FY 01 level **FY 01:** 15% of communities assessed* **FY 00:** develop surveillance protocol and plan **FY 99:** no indicator	**FY 02:** **FY 01:** **FY 00:** protocol and plan partially completed **FY 99:** no surveillance systems in place	**P:** p. 198 **B:** p. IHF-39 * indicates revised FY 2001 measure, see Summary of Changes Table on pages 126-130.
Total Prevention Funding :	**FY 02: $118,224,000** **FY 01:** $113,558,000 **FY 00:** $109,216,000 **FY 99:** $102,712,000 **FY 98:** $99,647,000		**P:** page # in perform. plan **B:** page # in budget justif.

B. FY 2002 Prevention Indicators:

Public Health Nursing Indicator:

Indicator 22: During FY 2002, increase by 2% the total number of public health nursing services (primary and secondary treatment and preventive services) provided to individuals in all settings and the total number of home visits over the FY 2001 workload levels.

Rationale: The purpose of this indicator is to improve the health status of AI/AN people through improved access to services associated with improved health outcomes. Public Health Nursing (PHN) is the integration of nursing practice and public health practice applied to the prevention of disease and the promotion and preservation of the health of Indian population. The nature of this practice is continuous and comprehensive, including all program areas and diagnostic groups. It includes primary and secondary treatment and preventive services, counseling, education, community development and referral follow-up. Many of the successes in Indian health such as decrease in infant mortality, high immunization rates, and increased prenatal care are attributed to the efforts of public health nursing.

The unique quality of PHN service is that care can be provided in any setting where the patient is accessible. This is especially effective for high-risk patients and families (e.g., substance abusing prenatal patients, communicable disease cases, families with dysfunctional life styles, etc.). Settings include homes, schools, jails, bars, and other community locations in addition to the health clinic. The ability to meet the patient in their own environment allows the PHN to fully assess socioeconomic and quality of life variables that affect health status and facilitates rapport with patients who often distrust the formal health care system.

Causes of health problems are multi-factorial and interventions must be multidimensional in order to be effective. Measuring the direct impact of public health nursing services can be accomplished in a variety of models. Many of the GPRA indicators (diabetes, prenatal care, immunizations, well child care, obesity) require a strong public health nursing contribution in order to be successful and to demonstrate evidence-based outcomes. The impact of home visiting with education and counseling services is more challenging to directly measure. Home visiting is generally accepted as a means to improve access to care and to impact on health status of individual patients, families and the community as a whole. Research ("Home Visitation and Maternal and Child Health – Kitzman et al, *Journal of the American Medical Association,* August 27, 1997 and "Enduring Effects of Nurse Home Visitation on Maternal Life Course – Kitzman et. al., *Journal of the American Medical Association,* April 19, 2000) supports this contention and concludes (after extensive controlled trials in which multiple outcome indicators were studied) that a "program of home visitation by nurses can reduce pregnancy-induced hypertension, childhood injuries, and subsequent pregnancies among low-income women". Other research (Long-term Effects of Nurse Home Visitation on Children's Criminal and Antisocial Behavior – Olds et.al., *Journal of the American Medical Association,* October 14, 1998) shows that adolescents born to women who received nurse visits during pregnancy and postnatally and who were unmarried and from households of low socioeconomic status (risks for antisocial behavior) reported fewer instances of running away, fewer arrests, fewer convictions and violations of probation, fewer cigarettes smoked, and fewer days of having consumed alcohol. Therefore, public health nursing workload, especially community based visits and home

visits, is used as measure of program effectiveness and an overall indicator of health status of the community.

Approach: The population base for public health nursing services is the IHS census population residing within the official boundaries of the Area. The PHN/RRM standard indicates that PHN program addresses the needs of the community and therefore the appropriate target population is census population. However in some service units, the user population is greater than the reported census population. In these cases, the Indian user population is used as an estimate of the service population to reflect PHN service to both stable community and transient populations.

Providing access to PHN services is directly dependent upon the availability of community-based resources, particularly recruiting and retaining PHN providers. Strategies for increasing access to care and marketing healthy life style behaviors includes targeting high-risk patients based on community epidemiological data. Newborns, infants, pregnant women, and elders are targeted high risk populations in Indian communities both from an individual perspective based on their high-risk status and from a psychosocial perspective based on their contributions to healthy family and community life.

Baseline: FY 2001 workload data will be verified using RPMS procedures described on page 121and analyzed to define the baseline for the objective. IHS nursing staff is currently working with data management staff to refine data collection and analysis processes which would allow workload breakdown by both age categories (newborn, infant, elder) and by diagnostic category (teen pregnancy, family planning, anticipatory guidance to parents, SIDS prevention, health promotion for the elderly wellness). This will provide a more in-depth perspective of the breadth of public health nursing services and the targeting of high-risk populations.

Data Sources: IHS PCC, IHS Program Statistics Team, and written reports submitted by Tribes using non RPMS systems.

Type of Indicator: Process/Impact and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* It also broadly supports a multitude of HP 2010 objectives.

Program Performance: The FY 2000 performance indicator committed to increasing the total number of Public Health Nursing services and the number of home Public Health Nursing visits to the AI/AN population by 7% over the FY 1997 level. This indicator was met based on comparison of the FY 1997 and FY 2000 Public Health Nursing productivity reports. In FY 1997, the total Public Health Nursing visits were 339,283 and the home Public Health Nursing visits were 119,482. The FY 2000 Public Health Nursing report reflects that 371,548 total Public Health Nursing visits were provided (9.5% increase) and 127,873 home Public Health Nursing visits were provided (7% increase).

Immunization Group:

The following two indicators support immunization coverage in children and adults at high risk for preventable diseases and represent perhaps the most efficacious "impact" interventions known to public health.

Indicator 23: During FY 2002, increase the proportion of AI/AN children who have completed all recommended immunizations for ages 0-27 months as recommended by the Immunization Practices Advisory Committee (ACIP) of the U.S. Public Health Service by 1% over the FY 2001 level.

Rationale: The purpose of this indicator is to reduce the incidence of preventable diseases in children. Immunizations are one of the most cost-effective public health measures available for improving health outcomes in children and are a recognized standard of care and immunization rates are a recognized standard of public health. Thus, vaccination coverage rates are a sensitive measure of the status of public health services and are essential to the IHS Mission.

Approach: Percent of children vaccinated appropriately for age will be calculated for the IHS service population of children from each Area. Vaccines evaluated include polio (IPV),Diphtheria/Tetanus/Pertussis (DTaP), Measles/Mumps/Rubella (MMR), Haemophilus influenzae type b (HIB), Hepatitis B (HBV), and Hepatitis A (HAV). IHS continues to rely on a system of complete ascertainment. This system is supplemented by periodic statistically valid sampling to establish more reliable coverage estimates. IHS will be primarily responsible for completing the surveys.

Data Source: IHS patient care records and public health nursing records.

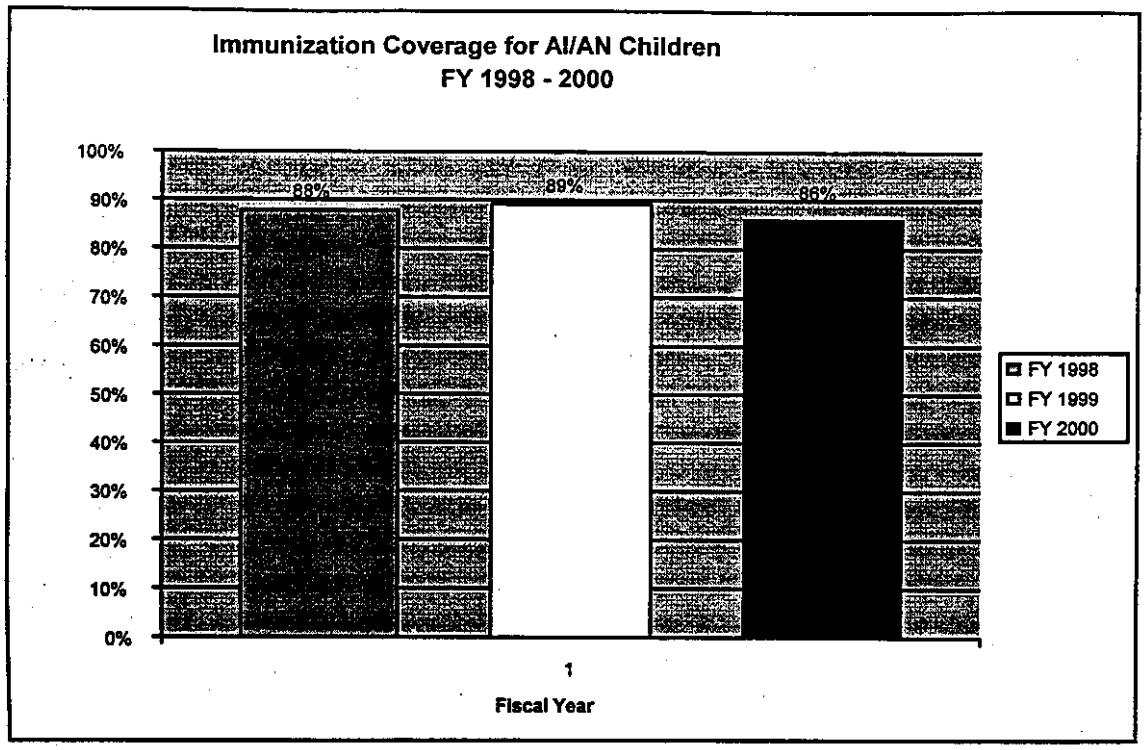
Baseline: 89% based all 12 Areas.

Type of Indicator: Impact and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* It also directly addresses the HP 2010 objectives in Focus Area 14: Immunizations and Infectious Diseases.

Program Performance: The FY 2000 performance indicator was to increase by 2% over the FY 1999 rate the proportion of AI/AN children who have completed all recommended immunizations by the age of two. As the FY 1999 rate was 89% for all 12 Areas, the goal for FY 2000 was to achieve 91% coverage. Based on quarterly reports from all 12 IHS areas for FY 2000, the proportion of AI/AN children who completed all recommended immunizations by 27 months was 86%; the FY 2000 performance measure of 91% was not achieved.
Reasons for not meeting the FY 2000 performance indicator include:

- general problems with the infrastructure to deliver vaccines, such as vacancies in positions essential for the delivery, tracking and reporting of immunizations (i.e. public health nurses, medical records staff)
- reduced emphasis on immunizations in generalized primary care settings because of growing urgent care demands
- increasingly complex immunization schedules as new vaccines are added
- incomplete tracking due to the multiple sources of health care (many non-IHS)
- IHS immunization computer program not fully utilized at many local facilities



Steps taken to address challenges:

- IHS is addressing agency-wide recruitment and retention problems
- target funding toward improving immunization coverage levels.
- development of immunization information materials specific to AI/AN communities in order to educate parents on the importance and safety of new vaccines is on-going.
- eliminate barriers to effective utilization of IHS computer program for local tracking of immunizations.
- efforts to work with states to facilitate data exchanges with IHS facilities for the purpose of developing state-wide immunization registries and improve immunization tracking across health care facilities (both IHS and non-IHS) are underway.

Indicator 24: During FY 2002, increase pneumococcal and influenza vaccination levels among adults aged 65 years and older by 1% over the FY 2000 level.

Rationale: The purpose of this indicator is to reduce the incidence of vaccine-preventable diseases in adults and elders. Immunizations are one of the most cost-effective public health measures available for improving health outcomes. In addition, adult vaccination coverage rates are a sensitive measure of the status of clinical preventive services and are essential in supporting the IHS Director's elder health project. This indicator also directly supports the HP 2010 "Immunizations and Infectious Disease" objectives.

Approach: The IHS follows the recommendations of the Immunization Practices Advisory Committee (ACIP) of the U.S. Public Health Service. Recommendations for prevention and control of influenza change yearly depending on a number of factors such as global monitoring of influenza virus activity and experiences from the prior influenza season. In 2000, the age for universal adult influenza immunization was lowered from 65 years to 50 years of age. IHS has not implemented new programs aimed specifically at immunizing adults age 50 to 64 years,

therefore the current HP 2010 target of influenza vaccination for 90% of adults 65 years of age remains as the overall program goal. Recommendations for prevention and control of pneumococcal disease have not changed, although the minimum age for universal immunization of AI/AN includes all ages in many AI/AN communities. By FY 2002 pneumococcal conjugate vaccine (PCV7) may be recommended for adults. Until ACIP changes recommendations, however, IHS continues to focus on the most at-risk age groups for pneumococcal disease, including adults 65 years of age. Implementation of ACIP recommendations is undertaken at the local level by clinicians, nurses, and public health nurses with guidance from Area Immunization Coordinators under direction of the IHS National Immunization Coordinator. Recent recommendations by ACIP suggest that standing orders programs that authorize nurses and pharmacists to administer vaccinations according to an institution- or physician-approved protocol without a physician's exam may improve adult immunization rates.

Data Source: The immunization rate for influenza was determined from a simple random sample of 5000 electronic medical records of all AI/AN over age 65 (N=80,454) from the NPIRS (National Patient Information Resource System). All records in the sample were scanned for any record of influenza immunization. This immunization coverage rate includes adult AI/AN who received their influenza vaccination only at an IHS facility. There is often no documentation of adult immunizations received in nontraditional settings such as churches and pharmacies. FY2000 was the first year that we have attempted to measure immunization rates among all adults; in previous years we have only determined rates in the population with diabetes. The FY1998 baseline immunization rate among adults with diabetes was 63% (data from the Annual Diabetes Care Audit). Because of their more intensive clinical monitoring and high-risk status, it is not appropriate to use the immunization rate among diabetics as a baseline for the rates in the general population. It is likely, however, that many AI/AN receive the flu shot from nontraditional sources outside the IHS medical record system.

Coverage rates for pneumococcal vaccination will require a different strategy given that current recommendations call for vaccination every five years in adults over 65 years of age. This year our focus was on developing and evaluating use of statistical sampling for a small subset of indicators. We are currently developing a technique to sample and evaluate adults for receipt of pneumococcal vaccination. Our plan is to include an evaluation of pneumococcal coverage in FY2002.

In addition to exploring ways to capture immunization information from non-IHS sources, we are conducting a manual chart review of a subset of this sample to verify and measure the validity of our electronic medical records in order to determine the suitability of this method for subsequent GPRA reports.

A recent review of adult immunization rates in Alaska showed that the rate determined by electronic records was 29%, the rate by manual chart review was 59%, and the rate by chart review plus phone call was 78%.

Baseline: FY2000 was the first year that we attempted to measure immunization rates among all adults using statistical sampling of the NPIRS database. FY2000 and 2001 will be used to establish a baseline measure once the methodology has been verified and validated.

Type of Indicator: Impact and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 2.5 *Increasing Opportunities for Seniors to Have an Active and Health Aging Experience*, 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* It also directly addresses the HP 2010 objectives in Focus Area 14: Immunizations and Infectious Diseases.

Program Performance: The FY2000 performance indicator was to increase the overall pneumococcal and influenza vaccination levels among adults over 65 by 2% over the 1998 rate. As explained above, the FY 1998 baseline was not considered representative and a reliable baseline for comparison was not possible with our available systems during FY 1999. However, we have established a new electronic sample derived baseline for FY 2000:

- 30.7% of all AI/AN over 65 were vaccinated against influenza.

Pneumococcal immunization, which is only recommended once every 5 years, is more difficult to ascertain from IHS electronic medical records and we were not able to develop a baseline. Our approach for FY 2001 is to pilot and validate methods using influenza vaccination. Based on the outcome of these studies we will begin measuring pneumococcal vaccination rates to establish a baseline in FY 2001. In addition, because recommendations for receipt of these two vaccinations are subject to frequent change by ACIP, the indicator may be more appropriate if made in the form of a running three-year average of improvement toward the overall goal of 90% vaccination coverage.

Injury Prevention Group:

The following two indicators address the process and outcome of comprehensive community-based injury prevention efforts across I/T/U settings.

> **Indicator 25: During FY 2002, expand the number of tribes/tribal organizations that meet the criteria standards of IHS comprehensive injury prevention programs from the baseline of 25 tribes in FY 2000 to at least 30.**

Rationale: The purpose of this indictor is to reduce injury rates in the AI/AN population by the expansion of community based prevention technologies. Beginning in the early 1970s the IHS began a public health campaign to address this leading killer of AI/ANs. The early prevention efforts were based upon established Health Education/Health Behavior theories. Despite some success in raising awareness and some changes in human behavior, it was clear that a comprehensive public health approach would be needed to make a significant impact. The program began an aggressive injury surveillance effort in the early 1980s that created and empowered community coalitions and implemented evidenced-based strategies. The next and final step to this 30-year history in Indian Injury Prevention was the application of a community capacity building approach with the intent of developing the local public health capacity of tribes to significantly reduce injuries in their community's settings. This systematic process includes training, core-funding base, partnerships, implementing interventions, and technical assistance as needed.

These efforts have contributed to over a 50 percent reduction in unintentional injury related deaths between 1973 and 1993 and the expansion of the community capacity building approach is thus justified and represents the primary means to accomplish Indicator 26.

Approach: In FY 2000 IHS awarded approximately $1.25 million dollars to tribes to establish comprehensive injury prevention programs. This was part of the IHS Five Year Strategic Plan for Injury Prevention. These approximately 25 new programs will receive $50,000 per year for 5 years to hire a full time injury prevention coordinator, form an injury prevention advisory group, conduct basic injury surveillance, form partnerships, and begin to implement strategies to target those at risk for injuries, such as occupant protection, impaired driving, house fires, domestic violence, etc. Because technical assistance and support is so critical to new programs, IHS Area and District Injury Prevention Specialists will be engaged partners with these new tribal programs, and provide expertise in training, injury data collection, and evaluation. Experts in the field of community-based injury prevention will also be hired to provide technical assistance and support to all new tribal injury prevention programs.

Data Sources: Determining the implementation of comprehensive injury prevention programs will be determined from the use of a criteria-based survey of local I/T/U by each IHS Area Injury Prevention Specialist.

Baseline: 25 tribal programs in FY 2000 based on preliminary survey.

Type of Indicator: Process and Balance Scorecard: internal perspective

Linkages: These indicator supports the DHHS Strategic Plan, Strategic Objectives 1.2 *Reduce the Number and Impact of Injuries*, and 3.6 *Improve the Health Status of American Indians and Alaska Natives.* It also directly addresses the HP 2010 objectives in Focus Area 15: Injury and Violence Prevention that relate to unintentional injury prevention.

Program Performance: New indicator for FY 2002

Indicator 26: During FY 2002, reduce injury-related hospitalizations for AI/AN people by 2% over the FY 2001 level.

Rationale: Injuries are a leading cause of hospitalization for AI/AN people relative to morbid events. Annually, forty six percent (46%) of the Years of Potential Life Lost (YPLL) for AI/AN people are the result of injuries. Furthermore, injuries are the number one cause of mortality for AN/AN people for ages 1-44 years and second for overall death rates. The IHS spends more than $150,000,000 annually for the treatment of non-fatal injuries. The single largest expenditure of contract medical care funds is for the treatment of injuries. However, the systematic implementation of safety protocols through partnerships with tribes and outside agencies has demonstrated significant improvements in injury rates across AI/AN communities and will serve as models for further diffusion of these technologies.

Approach: The IHS has assigned a Principal Injury Prevention Consultant, in the Office of Public Health, at Headquarters who coordinates activities and resources with specially trained Injury Prevention Specialists at the Area, District, Service Unit and tribal levels. This program employs a community empowerment model based upon Dr. John Farquar's work at Stanford University (1985). Primary program emphasis is directed to building the capacity of tribes to recognize severe injury problems and employ evidence-based strategies to prevent or otherwise control injury outcomes. The Complete Injury Prevention Program model developed by IHS is the cornerstone of community-based intervention measures.

The IHS Five-Year Injury Prevention Strategic Plan identified the need for basic capacity building and investments in tribal and Federal infrastructures for the development of effective injury prevention programs. Since 1990, over $3.5 million has been appropriated to injury prevention programs and competitively based intervention projects. In 1997 the Director, IHS, supported a national demonstration grant announcement for basic public health infrastructure projects within tribes. Approximately $300,000 is awarded for the 13 tribal project sites. In addition to these projects, literally hundreds of Indian communities and Alaska Native villages are implementing proven injury prevention strategies associated with safe home and communities.

Most of the unintentional injury problem is related to motor vehicle crashes. Significant improvements can be made in these statistics with increases in use of occupant protection [safety belts and child safety seats], reducing pedestrian/motor vehicle collisions and reductions in alcohol-related injuries through multiple strategies including corrections in the physical environments, changes in tribal policies and health promotion/education. These injury measures are identified in the HP 2010 Objectives and are relatively easy to measure.

In FY 2000 IHS will be implementing a $1 million dollar cooperative agreement program with tribes to establish local injury prevention programs to address injuries. Other new projects are targeting childhood fire-related deaths through the *Sleep Safe* program in conjunction with Head Start schools, and continued work with our partners such as the Centers for Disease Control, the National Highway Traffic Safety Administration, the Maternal and Child Health Bureau at HRSA, and the US Fire Administration.

Data Source: In its original form from the FY 1999 performance plan, this indicator targeted injury mortality as the performance measure. However, due to the time lag of 2-3 years in the release of official injury mortality data from the National Center for Health Statistics (NCHS), IHS has determined that injury-related hospitalization rates are a more appropriate measure for the rate of unintentional injuries and will use this measure for the FY 2000 and FY 2001 indicators.

By using this approach the lag time in obtaining data can be shortened to less than one year as compared to the NCHS mortality data. In addition, these data include hospital discharges for IHS tribal and contract health care facilities and thus are considered inclusive. Finally, it is likely that the injury hospitalization rate may actually be more sensitive to the actual injury rates than mortality because improvements in emergency medical services could improve injury mortality without reducing the actual injury rate or morbidity.

Baseline: Estimated to be 72.5 per 10,000 in FY 1998 for AI/AN population on or near reservations.

Type of Indicator: Outcome and Balance Scorecard: internal perspective

Linkages: These indicators support the DHHS Strategic Plan, Strategic Objectives 1.2 *Reduce the Number and Impact of Injuries*, and 3.6 *Improve the Health Status of American Indians and Alaska Natives.* It also directly addresses the HP 2010 objectives in Focus Area 15: Injury and Violence Prevention that relate to unintentional injury prevention.

Program Performance: The FY 1999 measure for this indicator was to assure that the injury death rate was no greater than 93 per 100,000 deaths in the AI/AN population. While the data that is currently available is incomplete, it is highly likely that this measure has been met and possibly/probably exceeded. When the measure was initially set in FY 1998, the most recent rate available was 95 per 100,000 based on 1992-94 NCHS data. However, the FY 1994-96 data that became available last year showed that the rate had dropped to 92.6 per 100,000. Because of difficulties and delays in getting mortality data that we initially had hoped to overcome, we changed the indicator for FY 2000 and FY 2001, as described above, to focus on hospitalizations.

Regardless of how injuries are measured, the community-based joint partnership approach that has been used has proven successful, as injuries (unintentional and intentional) have dropped from the leading cause of death for Indian people of all ages in the early part of the decade to the 2nd leading cause of death currently (heart disease is now the leading cause for all ages). And while seven IHS Areas still have rates that are above the FY 1999 mortality target, most of these areas are in the rural west, such as the Navajo and Aberdeen Areas, where travel distances are long and residents are at high risk for motor vehicle-related injury. However, these Area rates have been trending downward over time, due to efforts in reducing pedestrian/motor vehicle crashes, tribes passing tougher drunk driving and occupant restraint laws, and stricter enforcement of these laws.

Suicide Prevention Indicator:

Indicator 27: During FY 2002, increase by 10% over the FY 2001 level, the proportion of I/T/Us that have implemented systematic suicide surveillance and referral systems which include:

a. **monitoring the incidence and prevalence rates of suicidal acts (ideation, attempts, and completions)**
b. **assuring appropriate population-based prevention interventions are implemented and those identified at risk receive services**

Rationale: This indicator is part of an expanding systematic effort at reducing the prevalence of suicide in the AI/AN population. The suicide death rate for the AI/AN population has actually increased in the 1990s and is currently 72% greater than the national average. This problem has been particularly devastating for a number of AI/AN communities that have experienced dramatic increases in adolescent suicides in recent years and represents one of the greatest tragedies the IHS must address. The implementation of local suicide surveillance and prevention projects has been successful in reducing suicide acts in several Indian communities. The obvious goal of diffusing intervention approaches and learning from successful programs to other AI/AN settings is to reduce suicide acts in the AI/AN population as quickly as possible.

Approach: The I/T/Us will be responsible for reporting the implementation of protocols via survey to be conducted by the Division of Clinical and Preventive Services, Office of Public Health. Resources for analysis may be required from other divisions within the Office of Public Health. A suicide surveillance and prevention system was developed in the Albuquerque IHS Area (National Suicide Prevention Project with the Center for Disease Control and Prevention). A suicide surveillance instrument that identifies potential high-risk individuals has been developed and is currently being used in clinics and case management systems have been

piloted. Numerous clinics, hospitals and behavioral health programs are currently using suicide surveillance protocols and now simply need to be identified and counted. A suicide surveillance and prevention system is being encouraged for use in I/T/Us to assure the routine suicide screenings and case management are tailored to the resources of each site. A baseline will be established via survey in 2000 and repeated in 2001.

Data Source: Local annual survey and database linked with RPMS as appropriate.

Baseline: To be determined in FY 2001, survey was inconsistent in FY 2000.

Type of Indicator: Impact and Balance Scorecard: internal perspective

Linkages: These indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* This indicator also directly supports several HP 2010 objectives in Focus Area 18: Mental Health and Mental Disorders which address the incidence of suicide.

Program Performance: No FY 1999 Indicator

Pilot Prevention Group:

The following three indicators represent demonstration efforts to test the application of prevention technologies in AI/AN communities and address community based cardiovascular disease prevention, childhood obesity control, and tobacco control. The successful strategies learned from these pilot projects will be then be diffused to other AI/AN setting in the future.

> **Indicator 28: During FY 2002, the IHS will continue collaboration with NIH to assist three AI/AN communities to implement culturally sensitive community-directed pilot cardiovascular disease prevention programs.**

Rationale: The purpose of this indicator is to collaborate with NIH and AI/AN communities in the development of community-directed culturally sensitive prevention programs to address cardiovascular disease and serve as models for diffusion to other AI/AN communities. Cardiovascular disease represents the single largest cause of death for AI/AN people above the age of 45. Furthermore, cardiovascular disease can be viewed as a complication of diabetes because of the much higher incidence of cardiovascular disease in diabetics. Within segments of the AI/AN population the prevalence of diabetes is the highest in the world while other segments with historically low diabetes rates are now experiencing dramatic increases. The diabetes death rate for AI/AN increased by almost 13 percent between the period of 1992-94 and 1994-96, and there is no evidence from any subgroup that the problem is lessening anywhere. A growing body of evidence supports that the approaches currently available to prevent the onset of heart disease and diabetes, and in some cases reverse their early stages, are the control of diet and exercise.

Over the past two years, the IHS has collaborated with the NIH National Heart, Lung, and Blood Institute and three AI/AN sites to assess their readiness to develop locally-directed cardiovascular disease prevention interventions that utilize community empowerment and other recognized models of behavioral change that can be tailored to be culturally appropriate.

Approach: The approach for this indicator is focused on collaborating to enhance long-term community commitment and capability in developing approaches to the prevention of cardiovascular disease at three AI/AN sites. This process will be mutually supported by IHS and NIH and will intentionally avoid a largely prescriptive approach from "outside experts" for program development but rather assist these communities in developing the capabilities internally to apply intervention technologies that are culturally tailored to these communities" social environment.

Clearly identifying approaches to the integration of diet control and exercise and fitness activities into the local culture can be best accomplished by the bringing together the knowledge of evidenced-based practices and theories (i.e., social learning theory, self-efficacy, etc.) with the knowledge of local culture, beliefs and practices. The FY 2001 target for this indicator is the collaborative development and community acceptance of the prevention plan. The FY 2002 target is the actual implementation of the each site's prevention program.

Potential interventions adopted are likely to vary considerably based on the tailoring process and support requested by sites but may include:

- organization-based fitness and diet control programs (worksites, churches)
- school- based fitness and diet control programs education programs for Head Start - high school and college
- social marketing of healthy practices through available media sources (radio, TV, newspapers, social events, the web)
- use of field public health staff to reach families in homes or other sites (e.g., public health nurses, health aides, health educators, dieticians and nutritionists)
- integration of traditional healing practices
- expanded clinic-based fitness and diet control intervention

While the evaluation must be linked to the nature of the interventions the potential levels of evaluation that are likely to be developed included:

Long term – death and disease rates
Intermediate – observed or reported changes in risk factors (behavioral changes)
Short term – observed or reported changes in knowledge or attitudes
Immediate – activity implementation and monitoring

Data Source: To be developed by local sites consistent with interventions

Baseline: No well-defined programs believed to be currently functioning

Type of Indicator: Impact and Balanced Scorecard: innovation and learning perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 1.3 *Improve the Diet and the Level of Physical Activity of Americans*, 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* This objective is likely to support several HP 2010 objectives including many under section 12 (Cardiovascular Disease and Stroke), section 19 (Nutrition and Overweight), 5-7 (Diabetes: cardiovascular deaths), and Focus Area 22 (Physical Activity and Fitness)

Program Performance: No FY 1999 Indicator

> **Indicator 29: During FY 2002, maintain ongoing body mass index (BMI) assessments in AI/AN children 3-5 years old and/or 8-10 years old, for both intervention pilot sites and non-intervention comparison sites and evaluate community acceptance and participation in program interventions.**

Rationale: This indicator is part of a long-term effort to identify effective interventions to prevent childhood obesity. Obesity is prevalent among AI/AN people of all ages and is increasing significantly in a growing number of communities. Obesity is an important risk factor for cardiovascular disease and diabetes, which are perhaps the greatest single health problems for the AI/AN population. Unfortunately, success in reducing the prevalence of obesity and diabetes on a population basis has not been consistently documented. Evidence supports that children who are obese beyond infancy are at risk for elevated circulating serum insulin, which may be a precursor to the development of type 2 diabetes later in life.

Infant nutrition is emerging as another important factor in childhood obesity. Recently published studies of Pima Indians and also of Bavarian children show that breastfeeding for at least two months is associated with a statistically significant protection from obesity in early childhood. It has also been demonstrated that obese older children are more likely to become obese adults. Fitness promotion and obesity prevention in childhood are expected to be more effective at preventing adult obesity and its complications, including type 2 diabetes, than weight reduction programs for adults.

It is the intent of this objective to pilot a series of at least five multidisciplinary/ multidimensional community projects to address nutrition and fitness in early childhood. Ongoing periodic surveillance of school aged heights and weights will continue to monitor overweight prevalence in older children. Insights gained from the 6-year NIH-sponsored Pathways obesity prevention intervention in third, fourth, and fifth grade students, which began in FY 1997, will provide larger-scale interventions for school children. The recently released Surgeon General's Report on Physical Fitness outlines additional intervention strategies for reducing obesity. This objective directly supports the HP 2010 objectives addressing "Nutrition" and "Physical Activity and Fitness."

Approach: The responsible parties are the local I/T/U, Head Start, and WIC service sites. The IHS Area and USDA Regional offices can provide assistance in development and coordination of media campaigns. The IHS Office of Public Health is responsible for overall coordination of the effort. The linkages with the USDA-WIC program, the USDA, the DHHS Head Start Program, CDC Nutrition and Physical Activity Division, and the National Diabetes Prevention Center in Gallup, NM are critical. This objective is linked in part to Indicator 8, assurance of well child visits.

The strategies for success require effective multidisciplinary outreach and management of clinic and community programs, coordination of WIC, well child care, and education programs such as Head Start and Early Head Start. This activity is dependent upon parent education to assure they are aware of the importance of routine and periodic assessment of well children. Secondly, the effective identification of children in the intervention age groups is important. Public health nutrition, public health nursing, Community Health Representatives, WIC, Head Start programs,

and parent groups are important components in identifying children and families who are to benefit from this intervention.

Coordination of maternal and child health clinical care, community activities, and community involvement are also critical to prevent childhood obesity. Interventions will be piloted and evaluated initially at selected, interested demonstration sites, and then successful strategies and ideas will be disseminated to all programs. Evaluations of acceptance and participation must be tailored to each community and approved by health boards or other stakeholders groups Clinical data will be collected through the IHS RPMS computerized health record system using the PCC BMI reports developed to measure prevalence of obesity in the clinic population. Coordination between the Pediatric Surveillance System managers at the CDC Nutrition and Physical Activity Division and the IHS Office of Public Health is critical for data access and analysis of the IHS Service Area data subset.

Data Source: CDC Pediatric Nutrition Surveillance System (PDNSS), IHS RPMS system, consumer surveys, focus groups, observational surveys, and rates of participation.

Baseline: Determined by FY 1999 indicator and reported below. Baseline for acceptance and participation will levels will be collected beginning in FY 2001 and continue in FY 2002.

Type of Indicator: Impact/Outcome and Balanced Scorecard: innovation and learning

Linkages: This indicator is part of a long-term effort to reduce childhood obesity and supports the the DHHS Strategic Plan, Strategic Objectives 1.3 *Improve the Diet and the Level of Physical Activity of Americans*, 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* This objective also directly supports the HP 2010 objectives addressing Focus Area 22: Physical Activity and Fitness and Focus Area 19: Nutrition and Overweight and will require significant collaboration between IHS, CDC, WIC, and Head Start.

Program Performance: The FY 2000 indicator committed to developing at least five pilot sites to test multidisciplinary and multidimensional intervention strategies for reducing childhood obesity for Head Start population (3-5 year olds) and/or third grader children (8-10 year olds). This indicator was fully met in FY 2000 when five tribal Head Start programs were selected to pilot obesity prevention and intervention approaches in their respective communities. The IHS had collaborated with Head Start in developing a Head Start- IHS obesity prevention project entitled "Healthy Children, Healthy Families, Healthy Communities" that began in early 1999 with a "Future Search Conference" of stakeholders to begin planning the program with the broadest input. This program seeks to develop partnerships with AI/AN Head Start grantee programs, IHS and tribal health programs, and outside organizations.

The pilot sites selected from 18 applications are: Northern Cheyenne Head Start; Winnebago of Nebraska Head Start; Red Cliff Early Head Start and Head Start Program; Eastern Band of Cherokee Head Start; and San Felipe Pueblo Head Start. Each pilot site will tailor a multidisciplinary approach to test strategies to reduce the incidence of obesity with Head Start children (0-5 years old), their parents, Head Start staff and the tribal community at large. Each site is required to develop a community based project and strategic plan that includes an evaluation plan for ongoing monitoring of objectives and outcomes.

Current best practices and research are shared with the pilot sites through monthly conference calls, quarterly meetings and a web board. In addition, each site receives on site consultation to develop interventions and receives training and technical assistance at each quarterly meeting. Each pilot program will develop a tribal community plan that will include a nutrition, physical activity and behavioral health intervention. Specific activities and individual, family and community interventions are based on respective community need, health status and community assessments. For example, the Northern Cheyenne Head Start has engaged their local markets to allow staff to label healthy food in their store so tribal members are able to quickly identify healthy food choices for their families while shopping. This intervention was piloted in one store at the permission of the retailer. It was so popular, other vendors in the community requested assistance in establishing the same service.

Indicator 30: During FY 2002, five of the six tribal tobacco control organizations funded in FY2001 will accomplish all of the following:

a. **train key personnel in tobacco control and prevention methods by IHS, CDC, and other appropriate organizations.**

b. **develop capacity to provide assistance to Tribes in their region for tobacco policy development, including developing and sharing model tribal policies for control of Environmental Tobacco Smoke, Youth Access, and Advertising.**

c. **initiate a process to assess tobacco use patterns among AI/AN youth in their region.**

Rationale: Data from the BRFSS show that AI/AN both smoke and chew tobacco more than any other racial or ethnic group in the US. This is reflected in high rates of cancer and heart disease in Alaska and the Northern Plains, where smoking rates are highest. Furthermore, there is evidence that in the Southwest, where Indian smoking rates have been low, youth are smoking in increasing numbers. Considerable evidence supports that health promotion efforts that entail lifestyle change are more effective if initiated and performed by culturally competent individuals and community-based organizations. By supporting these tribal organizations with Cooperative Agreements, we hope to establish a tobacco control infrastructure that will be responsive to local needs and beliefs. IHS and CDC are collaborating to support these new tobacco control centers.

Approach: IHS Cancer Prevention and Control Program and CDC/Office on Smoking and Health will work together to provide technical assistance and training to the funded centers to ensure that they are able to perform the stated tasks.

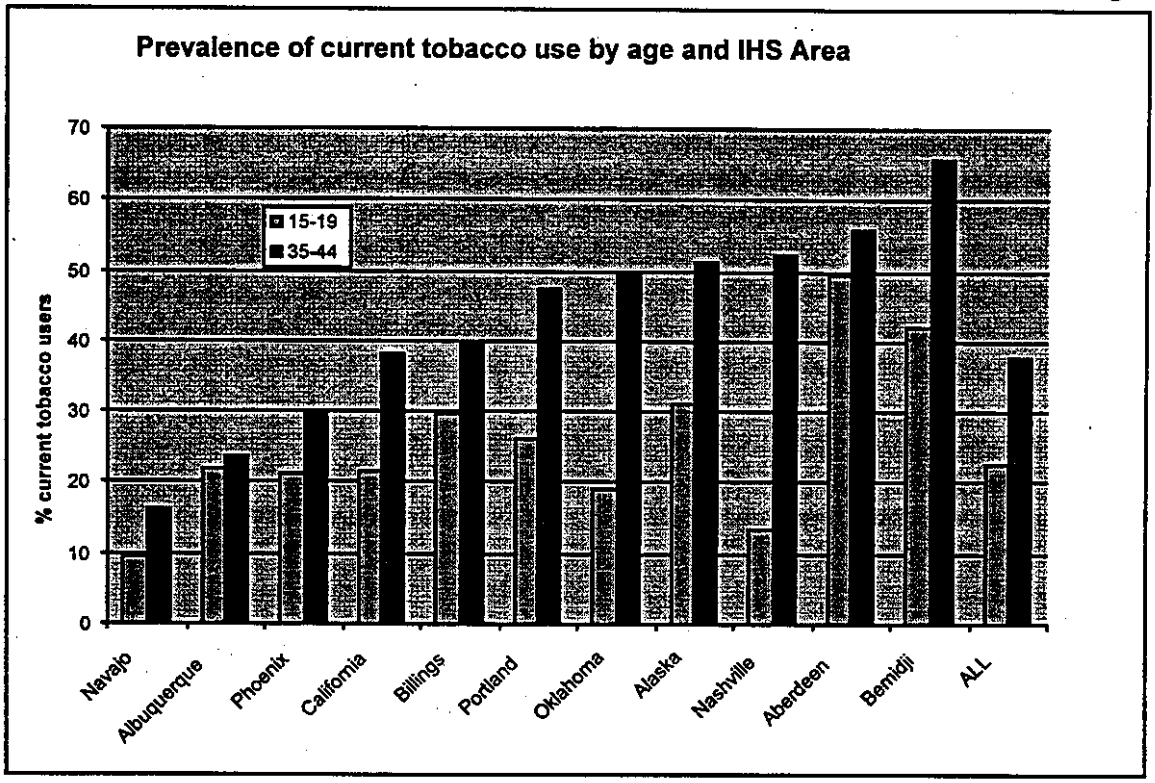
Data Source: Biannual reports submitted by the funded centers.

Baseline: Three of the six funded centers have been active in tobacco control for several years, but in a more limited scope. Those three have some trained staff; the new centers do not. Only one center has been active in Tribal tobacco policy in the past. Two centers have been active in assessment of youth smoking patterns.

Type of Indicator: Impact and Balanced Scorecard: innovation and learning

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 1.1 Reduce Tobacco Use, Especially among Youth; 3.6 Improve the Health Status of American Indians and Alaska Natives, and 5.1 Improve Public Health Systems' Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population. It is supported by an IHS/CDC Agreement, and supports several HP 2010 objectives in Focus Area 27: Tobacco Use.

Program Performance: The FY 2000 tobacco indicator was to determine IHS Area and age-specific prevalence rates for the usage of tobacco products. In FY 2000, 22.6% of all 15-19 year olds and 37.8% of all 35-44 year olds identified themselves as current tobacco users (either smoking or smokeless). This was determined through the IHS Oral Health Survey, a questionnaire administered by dentists throughout the IHS system. There were over 2000 respondents in each age category. Breakdown by IHS Areas is shown in the following chart:



Adult Area tobacco use rates varied from 16.3% in Navajo Area to 65.6% in Bemidji Area. Youth tobacco use ranged from 9.5% to 49.4%. This is consistent with previously reported data that show low tobacco use rates in the Southwest and very high rates in the Northern Plains and Alaska.

An effective tobacco control strategy must include both clinical cessation programs and community-based prevention. At this time, the IHS Areas are attempting to identify existing resources to support the necessary staff and pharmaceuticals for such efforts. However, we are developing a network of community prevention programs in partnership with CDC Office on Smoking and Health.

HIV/AIDS Group:

The following two indicators address improving surveillance of HIV/AIDS and the implementation of risk reduction counseling with the long-term goal of reducing the spread of HIV infection in the AI/AN population.

Indicator 31: During FY 2002, maintain ongoing surveillance of HIV/AIDS and establish baselines for completeness of reporting in at least 6 additional Areas.

Rationale: The purpose of this indicator is to assure that accurate and complete data on the burden of HIV infection and AIDS among American Indians and Alaska Natives and are critically needed to plan for resource mobilization and allocation, and to guide and evaluate intervention programs to prevent HIV transmission. The Indian Health Service maintains service data that include HIV and AIDS diagnoses, and providers submit this information to the HIV/AIDS surveillance programs of the appropriate State Health Departments, from which they are then sent to CDC. A cumulative total of 742 HIV infections and 2,132 AIDS cases among AI/ANs had been reported to CDC as of December 31, 1999 (CDC. HIV/AIDS Surveillance Report, 1997 Year-End Edition, Vol. 9, No.2). Reported AIDS cases among AI/AN have increased 10% per year from 1997 to 1999 (CDC. HIV/AIDS Surveillance Report, 1999 Year-End Edition, Vol. 11, No.2).

Data analyzed for FY 2000 indicated that incompleteness of case reporting and misclassification of race/ethnicity contributed to underestimation of the burden of HIV and AIDS in AI/AN communities. Because FY 2000 data were found to not accurately describe the HIV/AIDS epidemic among American Indians and Alaska Natives, the FY 2001 indicator has been revised to reflect the need to increase the completeness of case reporting (see change table, Indicator 31 on page 130). The FY 2002 version is designed to measure the increasing ability to accurately track HIV/AIDS spread within the AI/AN population.

Approach: Completeness of surveillance data is to be evaluated by matching IHS RPMS data with HIV/AIDS surveillance data collected by State Health Departments/CDC. With adherence to standards for protection of confidentiality, records of persons diagnosed with HIV or AIDS will be abstracted from the RPMS data system and sent to the appropriate State Health Department for matching with the HIV/AIDS data system, to determine whether the cases have been reported.

Data Source: IHS RPMS; State and CDC HIV/AIDS Surveillance Systems

Baseline: To be determined in FY 2001

Type of Indicator: Process and Balanced Scorecard: innovation and learning

Linkages: This indicator is changed from FY 2001 and supports the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 5.1 *Improve Public Health Systems' Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population.* It is supported by IHS/CDC agreements, and supports several HP 2010 "HIV Infection" and "Surveillance and Data" objectives.

Program Performance: The FY 2000 performance indicator committed to determine prevalence rates of HIV/AIDS infection in American Indian/AlaskaNatives at Indian Health Service treatment facilities and obtain infection rate nationally from Centers for Disease Control. This measure was partially met. Prevalence rates of HIV/AIDS infection in American Indian/Alaska Natives at Indian Health Service treatment facilities were not obtainable given the existing data infrastructure, as laboratory codes for HIV testing and testing HIV positive have not yet been standardized. To address this, a procedure is being developed for extraction of data

from key IHS Resource Patient Management System data files and mapping to a standard set of codes, so that data aggregation is possible in the future. However, until a generalizable procedure is developed, this project is proceeding on a facility-by-facility basis (as each facility has some codes that are unique).

The Centers for Disease Control and Prevention reported an AIDS rate of 9.7 per 100,000 for American Indians and Alaska Natives for the year 2000. However, some preliminary investigation has indicated that there may be substantial underreporting because many American Indians/Alaska Natives are listed as being of another race in the surveillance data. To address this issue, several projects are underway to quantify the degree of misclassification by race. It may be possible to use the results from these projects to apply a racial misclassificaton correction factor to these surveillance data.

Note, this is a new FY 2002 and FY 2001 Indicator

Indicator 32: During FY 2002, increase the percentage of high risk sexually active persons who have been tested for HIV and received risk reduction counseling at least 10% above the baseline established in FY 2001.

Indicator 32: During FY 2001, obtain a baseline measure of the percentage of high-risk sexually active persons who have been tested for HIV and received risk reduction counseling, from a sample of IHS facilities.

Rationale: The purpose of this indicator is to reduce the spread of HIV infection in AI/AN communities. The benefits of early knowledge of HIV serostatus are greater now than at any time during the epidemic. For HIV-infected persons, highly active antiretroviral therapy has improved dramatically the quality and duration of life and may reduce the risk for transmission by decreasing viral load (Palella FJ, Delaney KM, Moorman AC. Declining morbidity and mortality among patients with advanced human immunodeficiency virus infection. N Engl J Med 1998;338:853--60; .Gupta P, Mellors J, Kingsley L, et al. High viral load in semen of human immunodeficiency virus type 1infected men at all stages of disease and its reduction by therapy with protease and nonnucleoside reverse transcriptase inhibitors. J Virol 1997;71:6271--5; Vernazza PL, Gilliam BL, Flepp M, et al. Effect of antiviral treatment on shedding of HIV-1 in semen. AIDS1997;11:1249--54.). Reduced HIV transmission also can occur because many infected persons may reduce sexual risk behavior after HIV-infection diagnosis (Denning P, Nakashima A, Wortley P, the SHAS Project Group. High-risk sexual behaviors among HIV-infected adolescents and young adults [Abstract]. In: Program and Abstracts of the 6th Conference on Retroviruses and Opportunistic Infections. Chicago, Illinois: Foundation for Retrovirology and Human Health, 1999.). In addition, monitoring the burden of HIV/AIDS among American Indians and Alaska Natives depends ultimately on the diagnosis of infections through testing of high-risk individuals. Therefore, to support prevention efforts and to improve monitoring of the spread of HIV/AIDS, the Indian Health Service is working to increase availability and access to voluntary and confidential HIV diagnostic testing by constituents who do not know their HIV status, link them to care and prevention services, and assist them in adhering to treatment regimens and in sustaining risk reduction behavior. The percentage of high-risk persons who have received an HIV test is thus a critical indicator, and was added as a new indicator for FY 2001 to establish a baseline with the FY 2002 version designed to measure the expansion of HIV testing and counseling.

Approach: A baseline will be established in FY 2001 through implementation of a web-based surveillance enhancement software in selected IHS facilities. This software will query the RPMS system to determine the percentage of STD patients tested for HIV in IHS facilities. The web-based system will be used again in FY 2002 and the results compared with the FY 2001 baseline measure.

Data Source: ID Web, a web-based surveillance enhancement software.

Baseline: To be determined in FY 2001

Type of Indicator: Impact/Outcome and Balanced Scorecard: innovation and learning

Linkages: This indicator is changed from FY 2001 and supports the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 5.1 *Improve Public Health Systems' Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population.* It is supported by IHS/CDC agreements, and supports several HP 2000 "HIV Infection" and "Surveillance and Data" objectives.

Program Performance: No FY 2000 indicator

Environmental Surveillance Indicator:

Indicator 33: During FY 2002, the IHS will increase the proportion of American Indian and Alaska Native communities assessed by the environmental health surveillance system by 10% over the FY 2001 level.

Rationale: This indicator is directed at reducing environment threats to health by expanding community information for decision making. Community environmental health status has traditionally been determined by completing environmental health surveys of individual facilities listed on the Facility Data System (FDS) inventory. However the overall environmental health status of a community is more than a simple sum of inter-related parts. An accurate determination of a community's environmental health status must be based on a comprehensive analysis of how those parts collectively affect the overall environmental health and quality of life of the residents of the community. Overall community environmental health status will be continuously assessed through the use of the environmental health surveillance system that will be developed during FY 2000. However to effectively measure improvement in the environmental health status of a community, baseline environmental health status must be determined by conducting initial comprehensive community environmental health assessments.

Approach: The Environmental Health Services program will work with the National Center for Environmental Health (NCEH), the National Association of City and County Health Officials (NACCHO), and Tribal partners to establish a surveillance protocol and implementation during FY 2000. This protocol will be employed in conducting the initial community assessment and for ongoing surveillance. At the regional level, this project will be coordinated with the IHS Area Environmental Health Officers in partnership with the tribes and local IHS environmental health services programs.

The collection, organization, and implementation of environmental health and epidemiological data may redesign the services and activities currently provided by and recommended by the

Environmental Health Services program. We are not certain that the assumptions used to build the current system are still valid (FDS vs. risk-based decision making). Data analysis is necessary to establish baseline levels of community environmental health, evaluate the effectiveness of existing programs and to plan future programs to insure that resources and activities are best targeted to most effectively reduce environmentally related disease and injury at the local level.

Data Source: IHS Environmental Health Surveillance System developed in FY 2000.

Baseline: To be established by the end of FY 2001.

Type of Indicator: Process and Balanced Scorecard: internal perspective

Linkages: This indicator is an extension of FY 2000 Indicator 26. It supports the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 5.1 *Improve Public Health Systems Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population.* It also broadly supports many of the HP 2010 objectives in Focus Area 8: Environmental Health.

Program Performance: For FY 2000 this indicator committed to developing the protocol and implementation plan for an environmental health surveillance system to provide the information needed to identify environmental health issues, establish local and regional priorities, and develop and evaluate environmental interventions and programs. This indicator was partially met during FY 2000 with the following actions being completed:

- An IHS/Tribal Community Assessment Workgroup was established. The Workgroup held one conference call to discuss the goals of the community assessment process and organize itself to work toward achieving those goals.
- Consultation meetings were held in Denver and Albuquerque to solicit input from tribal and community leaders regarding their perspective of community environmental health needs.
- IHS received input from the National Center for Environmental Health and the National Association of City and County Health Officials regarding existing community assessment protocols that were forwarded to the Community Assessment Workgroup.
- Draft protocols were field tested in tribal communities in the Bemidji, Phoenix, and Tucson Areas.

The following factors were responsible for the Agency's failure to completely meet this indicator:

- The responsibilities for coordinating activities under this indicator were assigned to the Deputy Director, Division of Environmental Health Services (DEHS). This individual transferred out of the Agency in November of 1999 and was not replaced until November of 2000. At the same time, one additional senior staff member was detailed to the Office of Public Health and not replaced until November of 2000. As a result of these temporary staff reductions there simply wasn't enough staff time available to complete the identified activities.
- The process of soliciting input from tribal and community leaders proved to be more time consuming than originally estimated.

Recent additions to the DEHS will relieve the staffing shortages that were experienced during FY 2000, and we are confident that the protocol will be completed and field implementation begin during this fiscal year.